



PAVUS, a.s.
Notified Body No. 1391
Prosecká 412/74, 190 00 Praha 9 - Prosek
Decision No. 27/2013-CPR of 13th December 2013

CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1391-CPR-0166/2014

In compliance with Regulation 305/2011/EU of European Parliament and of the Council of 9 March 2011 (the Construction Product regulation or CPR), this certificate applies to the construction product.

Circular single compartment smoke extraction duct, type NORDsmoke

Technical parameters of the product:
are stated in the Annex No. 1 of this certificate of constancy of performance

Intended use of the product in buildings:
Smoke control duct sections that are to be used in smoke control systems at 600 °C

produced by:
ETS NORD AS
Peterburi tee 53G, 11415 Tallinn, Estonia

and produced in the manufacturing plant:
ETS NORD AS
Aruküla tee 55, 75301 Jüri, Estonia

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

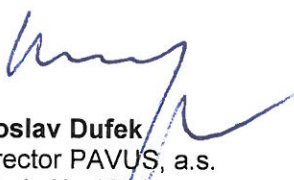
EN 12101- 7:2011

under system 1 for the performances set out in this certificate are applied and that
the construction product fulfils all the prescribed requirements for these performances

This certificate was first issued on 31st October 2014 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performances of the declared essential characteristics, do not change, and the construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body.

In Prague 31st October 2014




Ing. Jaroslav Dufek
Managing Director PAVUS, a.s.
Notified Body No. 1391

Technical parameters of the product, end use application and essential characteristics are listed in Annex No.1 on back page of this certificate of constancy of performance.

Technical parameters of the product

| | |
|--|--|
| Product | Circular single compartment smoke extraction duct |
| Trade name | NORDsmoke circular smoke duct sections |
| Classification according to EN 13501-4:2007+A1:2009 *) (test according to EN 1366-9:2008) | E₆₀₀ 120 (h_o) S1500single |
| Form and dimensions | Duct sections are made from galvanized steel sheet, thickness 0,9 mm; Joint of two segments is made with element "NIL-T 560 Coupling". Joints are sealed by the Fire sealant 1200 °C (producer Den Braven). The joint is fastened by steel blind rivets on one side and by aluminium rivets on second side. Dimensions of duct sections are up to maximum size - diameter 1000 mm. |

End use application

| | |
|-------------------------|--|
| Intended use | Single compartment smoke control duct sections are used in smoke control systems at 600 °C |
| Max. underpressure | -1 500 Pa |
| Max. overpressure | +500 Pa |
| Penetration seals | The fire-stopping at the penetration through the supporting construction: mineral wool thickness 50 mm |
| Supporting construction | Standard rigid wall construction made of aerated concrete, thickness min. 150 mm |

Essential characteristics

| Essential characteristics | Requirement clauses in EN 12101-7 | Mandated level and/or classes / Findings | Conformity Assessment |
|--|-----------------------------------|--|-----------------------|
| Fire resistance | | | |
| - integrity (E) | 4.1.2 a), 4.4.1 | E ₆₀₀ / limit: 10 m ³ h ⁻¹ m ⁻² / findings: 1,13 m ³ h ⁻¹ m ⁻² | Conforms |
| - insulation | - | - | **) |
| - smoke leakage (ES) | 4.1.2 b), 4.4.1 | E ₆₀₀ S / limit: 5 m ³ h ⁻¹ m ⁻² / findings: 1,13 m ³ h ⁻¹ m ⁻² | Conforms |
| - mechanical stability (under E) | 4.1.2 c) | 125 minutes, no failure | Conforms |
| - maintenance of cross-section (under E) | 4.1.2 d) | 125 minutes, no failure | Conforms |

*) Conditions of classification are stated in Fire Resistance Classification Report No. PK4-01-14-002-E-0, issued by PAVUS, a.s. of 2014-10-14.

***) Insulation classification is not required for single compartment smoke control duct sections



[Signature]
Ing. Jaroslav Dufek
 Managing Director PAVUS, a.s.
 Notified Body No.1391